

GOROMOSO", M.S., red.; GROMBAKH, S.M., red.; ZHDANOV, V.M., red.;
POKROVSKIY, A.A., red.; KROTKOV, F.G., red.; LETAVET, A.A.,
red.; LITVINOV, N.N., red.; RYAZANOV, V.A., red.; URAZAEV,
N.M., red.; CHERKINSKIY, S.N., red.; KHAMIDULLIN, R.S., red.

[Transactions of the 14th All-Union Congress of Hygienists
and Public Health Physicians] Trudy Vsesoiuznogo z"yezda
gigienistov i sanitarnykh vrachei, 14. Moskva, Medgiz,
1963. 322 p. (MIRA 18:2)

1. Vsesoyuznyy s"yezd gigiyenistov i sanitarnykh vrachei.
14th. 2. Glavnyy uchenyy sekretar' AMN SSSR (for Zhdanov).

POKROVSKIY, A.A.; BOGDANOVA, I.M.

Characteristics of the secretion of proteolytic enzymes of
gastric juice in various diseases. Vop. med. khim. 9 no.2:
217-218 Mr-Apr '63. (MIRA 17:8)

1. Institut pitaniya AMN SSSR, Moskva.

POKROVSKIY, A.A., prof.

Eat right. Zdorov'e 9 no.5:12-14 My'63.

(MIRA 16:9)

1. Chlen-korrespondent AMN SSSR.
(NUTRITION)

LOZOVY, D.A., kand. tekhn. nauk; POKROVSKIY, A.A., inzh.

A book for workers and innovators. Avt. dor. 26 no.6:31 Je '63.

(MIRA 16:8)

(Road machinery)

POKROVSKIY, Aleksey Alekseyevich, prof.; LYADOVA, V., red.

[Talks about nutrition] Besedy o pitanii. Moskva,
Ekonomika, 1964. 286 p. (MIRA 18:6)

1. Chlen-korrespondent AMN SSSR (for Pokrovskiy).

POKROVSKIY, A.A.

Some problems in the science of nutrition in the light of the decisions of the December Plenary Session of the Central Committee of the Communist Party of the Soviet Union on the development of chemical heavy industry. Vest. AMN SSSR. no.4: 80-87 '64. (MIRA 18:8)

1. Institut pitaniya AMN SSSR, Moskva.

L 8432-65 EWT(1)/EWA(b) Pa-4 AS(mp)-2/AMD/AFMDC/APGC(c)/AFWL RO
ACCESSION NR: AP4044250 S/0240/64/000/008/0053/0060

AUTHOR: Pokrovskiy, A. A. (Professor); Ponomareva, L. G.

TITLE: A high-speed, fermentation method of microanalysis for identification of residual amounts of organophosphorous insecticides⁸

SOURCE: Gigiyena i sanitariya, no. 8, 1964, 53-60

TOPIC TAGS: organophosphorous compound, insecticide, microanalysis, anticholinesterase, chromatography

ABSTRACT: A simple, highly sensitive method of group analysis has been developed for the identification of organophosphorous insecticides in the external environment based on their anticholinesterase properties. For this purpose a portable kit has been devised containing stable reagents good for 100 analyses. Preliminary analysis of contamination by insecticide can be performed under field conditions in 10-20 min. The anticholinesterase reactions of the six most important insecticides have been studied, and calibrated curves have been constructed for their determination. Without preliminary activation the method makes it possible to determine amounts from

Card 1/2

L 8432-65

ACCESSION NR: AP4044250

1 to 100 μ g of insecticides per ml. The anticholinesterase action of chlorophosphorus gradually increases while it's being dissolved in buffer solutions at pH 7.4 and being extracted from plants. This, apparently, can be explained by the transformation of the insecticide into a compound with high anticholinesterase properties. It has been possible with paper with anticholinesterase properties to use chromatographic methods to identify the chemical nature of organophosphorous insecticides. Orig. art. has: 5 figures and 1 table.

ASSOCIATION: Laboratoriya klinicheskoy enzimologii Instituta pitaniya AMN SSSR, Moscow (Laboratory of Clinical Enzymology of the Institute of Nutrition, AMN SSSR)

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Card 2/2

MARKOVA, M.N.; POKROVSKIY, A.A.

Determination of total cholesterol and phospholipids in a micro-drop of blood. Lab. delo 10 no.3:145-150 '64. (MIRA 17:5)

1. Institut pitanya (direktor - chlen-korrespondent AMN SSSR prof. A.A.Pokrovskiy) AMN SSSR, Moskva.

POKROVSKIY, A.A.

Problem of the determination of human nutritive requirements.
Vest. ANU SSSR 19 no.5:3-12 '64. (MEPA 12:3)

1. Institut pitaniya ANU SSSR, Moskva.

IONOVSKIY, A.A.; BELYI, Yu.A.; SLEPINA, T.A.

Dietetic principles of the treatment of obesity. Vest. A.M. USSR
19 no.5:63-69 '64. (Eng. 1:63)

1. Institut pitaniya ANU SSSR, Moskva.

POKROVSKIY, A.A.

Biochemical basis for developing products with increased
biological value. Vop. pit. 23 no.1:3-16 Ja-F '64.

(MIRA 17:8)

1. Institut pitaniya AMN SSSR, Moskva.

POKROVSKIY, A.A.; KOROBKINA, G.S.; NEMENOVA, Yu.M.; GUSHNEVA, Z.Ya.;
LUKASIK, I.S.; ALEKAYEV, N.S.

Belip, a protein product from the Institute of Nutrition of the
Academy of Medical Sciences of the USSR. Vop. pit. 23 no.2:21-30
Mr-Apr '64. (MIRA 17:10)

1. Institut pitaniyu AMN SSSR, Moskva.

POKROVSKIY, A.A.; ABRAROV, A.A.

Peroxyde resistance of erythrocytes. Vop. pit. 23 no. 6:44-49 N.D. '64.
(MIRA 18:6)

1. Institut pitaniya AMN SSSR, Moskva i Uzbekskiy nauchno-issledovatel'skiy institut gematologii i perelivaniya krovi, Tashkent.

POKROVSKIY, A.A., inzh.

Successful manual. Avt. dor. 27 no.2:28 F '64.

(MIRA 17:3)

POKROVSKIY, A.A.; PANCHENKO, L.F.

Processes of oxidation phosphorylation and oxidation of separate substrata in the mitochondria of the brain in experimental shock.
Dokl. AN SSSR 158 no.4:984-986 O '64.

(MIRA 17:11)

1. Vtoroy Moskovskiy gosudarstvennyy meditsinskiy institut im.
N.I. Pirogova. Predstavleno akademikom A.N. Bakulevym.

POKROVSKIY, A.A., prof., red.; SHTENBERG, A.I., prof., red.;
ORLOVA, N.V., red.

[Methods for the determination of pesticides in food
products] Metody opredeleniya pestitsidov v pishche-
vykh produktakh. Moskva, Meditsina, 1965. 139 p.
(MIRA 18:9)

1. Akademiya meditsinskikh nauk SSSR, Moscow. Institut
pitaniya. 2. Chlen-korrespondent AMN SSSR i Institut
pitaniya AMN SSSR (for Pokrovskiy).

POKROVSKIY, A.A.

Some problems of the biochemistry of nutrition. Zhur. VES
10 no.3:247-257 '65. (MIRA 18:8)

1. Chlen-korrespondent AMN SSSR.

POKROVSKIY, A.A.; SHEYKMAN, M.B.; PILENITSYNA, R.A.

Study of the activity of lipolytic enzymes in the adipose tissue.
Vop. med. khim. 11 no.4:72-76 11-Ag '65. (MIRA 18:8)

1. laboratoriya klinicheskoy enzimologii Instituta pitaniya
AMN SSSR, Moskva.

POKROVSKIY, A.A.; PARAMONOVA, E.G.; NEMENOVA, Yu.M. (Moskva)

Alimentary factor in the prevention of cardiovascular diseases.
Vest. AMN SSSR 20 no.6:24-30 '65. (MIRA 18:9)

POKROVSKIY, A.A.; YERTANOV, I.D. (Moscow)

Susceptibility of dietary proteins to proteolytic enzymes in vitro. Vop.pit. 24 no.3:38-44 My-Je '65.

(MIRA 18:12)

1. Laboratoriya klinicheskoy enzimologii (zav. - prof. A.A. Pokrovskiy) Instituta pitaniya AMN SSSR, Moskva. Submitted November 24, 1964.

ZHDANOV, D.A.; POKROVSKIY, A.A.; NIKITYUK, B.A.; ZILLE, L.N.

Nomograms for determining body weight by body length and chest circumference based on measurements of present adult population of Moscow. Arkh.anat., gist. i embr. 49 no.10:33-42 0 '65.

(MIRA 18:12)

1. Kafedra anatomii cheloveka (zav. - chlen-korrespondent AMN SSSR prof. D.A.Zhdanov) 1-go Moskovskogo ordena Lenina meditsinskogo instituta imeni Sechenova i Instituta pitaniya AMN SSSR. Submitted Nov. 3, 1964.

POKROVSKIY, A.A.; ARCHAKOV, A.I.

Study of the effect of promazine on the solubilization of liver
acetylcysterase (3.1.1.6) as affected by carbon tetrachloride.
Dokl. AN SSSR 160 no.5:1203-1205 F '65.

(MIRA 18:2)

1. Vtoroy Moskovskiy gosudarstvennyy meditsinskiy institut im.
N.I. Pirogova. Submitted October 12, 1964.

POKROVSKIY, Angelyar Aleksandrovich; ANDROSOV, A.A., kand.tekhn.nauk.
retsensent; NIKITIN, A.G., inzh., red.; UVAROVA, A.F., tekhn.red.

[Excavating and earthmoving machinery; brief practical handbook]
Zemlercino-transportnye mashiny; kratkii prakticheskiy spravochnik.
Moskva, Gos.nauchno-tekhn.izd-vo mashinostr.lit-ry, 1959. 149 p.
(MIRA 12:10)

(Earthmoving machinery)

POKROVSKIY, Angelyar Aleksandrovich; SIDORENKO, M.D., red.;
LUKASHEVICH, V.K., tekhn. red.

[Scrapers; brief manual] Skrepery; kratkii spravochnik. Saratov,
Saratovskoe knizhnoe izd-vo, 1961. 211 p. (MIRA 15:6)
(Scrapers)

POKROVSKIY, Angelyar Aleksandrovich; VOSKRESENSKIY, N.N., red.;
GORYACHKINA, R.A., tekhn. red.

[Road machinery for preparatory operations] Dorozhnye mashiny dlia
podgotovitel'nykh rabot. Moskva, Avtotransizdat, 1963. 74 p.
(MIRA 16:6)

(Road machinery)

POKROVSKIY, Angelyar Aleksandrovich; ZHIGALOV, A.T., nauchnyy red.;
YAKOVLEVA, V.I., red.; TOKER, A.M., tekhn. red.

[Handbook for the young scraper, bulldozer, and grader
operator] Spravochnik molodogo skreperista, bul'dozerista,
greiderista. Moskva, Proftekhizdat, 1963. 159 p.

(MIRA 16:5)

(Earthmoving machinery)

POKROVSKIY, A.A., inzh.

"Road construction machinery," a reference manual. Mekh. stroi. 21
no.3:30-31 Mr '64. (MIRA 17:3)

POKROVSKIY, A.A.; ARCHAKOV, A.I.; DEVICHENSKIY, V.M.; SHUMKINA, O.B.

Materials on the distribution of aldolases, transaminases and esterases
in liver cells. Dokl. AN SSSR 158 no.2:474-476 S '64.

(MIRA 17:10)

1. Predstavleno akademikom A.N.Bakulevym.

UNCLASSIFIED, DATE 08-01-2010 BY 60322

Characteristics of the changes in the cytoplasmic activity of brain tissues in reflex epilepsy. Dokl. akad. nauk. SSSR 1966, 177: 144-146.

1. Laboratoriya klinicheskoy enzimologii Instituta fiziologii ANU
SSSR.

POKROVSKIY, A.A., prof.

Some aspects of the use of enzymes in medicine. Zhur. VKHO
10 no. 6:648-658 '65 (MIRA 19:1)

(A) L 25587-66 ENT(d)/ENP(h)/ENP(1)			
ACC NR: AM6004821	Monograph	UR/	27 B+1
Sevrov, K. P.; Lozovoy, D. A.; Kabalkin, V. A.; Fomin, M. I.; Pokrovskiy, A. A.			
Road construction machinery (Dorozhnostroitel'nyye mashiny) Moscow, Izd-vo "Mashinostroyeniye", 1965. 384 p. illus., biblio. Errata slip inserted. 10,000 copies printed. Textbook for students specializing in road construction machinery at institutions of higher learning			
TOPIC TAGS: highway engineering, excavating machinery, construction machinery, road			
PURPOSE AND COVERAGE: The book describes the constructions of road building machines of Soviet manufacture (predominantly new models), and contains a brief review of the constructions of foreign machines as well as a description of original model designs. The main trends in the development of road building machinery are indicated. The purpose of the book was to help future engineers in the study of the construction of such machinery and is a textbook for students in courses of "Construction and Road Building Machinery and Equipment" and "Automobile Roads" of polytechnic and automobile-road institutes. It can also be used by engineers and technicians, mechanics, and constructors, during the operation of road-building machinery. It is intended to serve as a companion to the existing textbooks on the theory and design of machinery. Chapters 1, 2, and 4 were written by engineer A. A. Pikrovskiy, Ch. 3 by Candidate of Technical Sciences D. A. Lozov, Ch. 6 by Candidate of Technical Sciences K. P. Sevrov, Ch. 8 by Candidate of Technical Sciences V. A. Kabalkin, Chs. 9 and 10 by Candidate of Technical Sciences M. I. Fomin, Ch. 5 by Candidate of Technical Sciences N. L. Zhikharev, and Ch. 7 by B. N. Zakharov. The overall editor of			
Card 1/2	UDC: 621.0:625.002.2(075.8)		2

L 25587-66

ACC NR: AM6004821

the textbook was Candidate of Technical Sciences, Professor K. P. Sevrov

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1ST AND 2ND ORDERS																										3RD AND 4TH ORDERS																									
1ST AND 2ND ORDERS																										3RD AND 4TH ORDERS																									
POKROVSKIY, A-N 11 F Biochemistry of the nervous system. 1. Protein metabolism of central nervous system of rabbit. A. A. Pokrovskiy. Biochem. J. (Ukraine) 14, 307-410 (in Russian) (in English, 410-17) (1940).—Five phylogenetically different parts of the central nervous system of the rabbit were investigated: the oldest, the spinal cord, medulla oblongata and corpora quadrigemina, the thalamic region, cerebellum and, the youngest member, the cortex, of which the neocortex was used for analysis. The values for H_2O, total and residual N, calcd. on the dry wt., but not on the basis of fresh matter, rise in the phylogenetic order, the youngest members giving the highest values. The proteolytic activity follows the same order, both on wet and dry bases, rising with the decrease in age. The values for the autolytic index may be divided into three groups, each representing a different level of transforming afferent impulses into efferent, with various degrees of complexity. Spinal cord gives the lowest value, and the highest is in the cerebellum and cortex. These values, in the same substrates, vary considerably for different animals of the same age, sex and breed, but all follow the same general order. The proteolytic activity has a tendency to diminish with age. B. Gutoff																																																			
ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION 1ST ORDER 2ND ORDER 3RD ORDER 4TH ORDER																																																			

POKROVSKIY, A.A.

(Reviewer)

"Biological action and therapeutic use of β -chloroethylamines and sulfides" [in English] (in Science v.103, no.2675, p.409, 1946).

A.Gilman, F.Philips. Reviewed by A.A.Pokrovskii. Farm.i toks.10
no.2:62-64 Mr-Ap '47.

(MLRA 7:2)

(Chloroethylamines--Therapeutic use) (Sulfides--Therapeutic use)

1. POKROVSKIY, A. A.
 2. USSR (600)
 4. Spectrum Analysis
 7. Headpiece and cells for quantitative spectroscopy. Biokhimiia 18, No. 2, 1953.
9. Monthly List of Russian Accessions, Library of Congress, April 1953. Unclassified.

POKROVSKIY, A.A.

POKROVSKIY, A.A.; USACHEVA, N.T.

Apparatus for freezing areas of the skin on a whole animal. Vest.ven.i
derm. no.2:54 Mr-Ap '54. (MLRA 7:4)

(Medical instruments and apparatus)

~~POKROVSKIY, A.A.~~ ~~POKROVSKIY, A.A.~~

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A new fluorometric method for quantitative spectroscopy.
A. A. Pokrovskii. *Biokhimiya* 19, 570-3(1954).—The
method takes into consideration the fact that in the estn. of
highly concd. fluorescent substances, a greater sensitivity is
obtained with cups of a small cross section; in low concns. a
greater sensitivity and a higher degree of accuracy are ob-
tained with cups of larger cross section. B. S. Levine

RAW

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U S S R .

Quantitative spectroscopy with the aid of a pocket spectro-
scope. A. A. Pokrovskii. *Bull. Eksp. Biol. i Med.*
38, No. 8, 69-71 (1954).—The construction of a pocket spec-
troscope is described in detail. The advantages are low
cost, small vol. of fluid to be tested, and close proximity of
unknown and standard spectra. With the aid of the spec-
troscope it is possible to estimate the hemoglobin of small
animals or the amt. of blood sucked by insects.

S. M. U. A. Margolin.

POKROVSKIY, A-A.

USSR.

✓ A method for the permanent recording of chromatographic results. A. A. Pokrovskii. *Byull. Eksp. Biol. Med.* 39, No. 12, 69-70 (1954).—Negative prints are made of the original chromatograms on highly sensitive photographic paper after the R_f value and other pertinent data have been noted, and recorded on the original chromatogram. The

relative intensity of the localized spots as a factor for the calculation of quant. protein values is faithfully reproduced. Unlike the original ninhydrin-developed spots, the white spots on the negative record retain their area ramifications and intensities almost indefinitely. The formula $S = a \log C/b$ is used in the quant. estn. of the amino acids; where S is the surface area, C is the protein concn., and a and b are empirical constns. B. S. Levine.

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POKROVSKIY, A.A.

2
The quantitative evaluation of inflammatory reactions in experimental studies. A. A. Pokrovskii and V. I. Somia (Central Sci. Research Exptl. Inst. Military Med., Moscow). *Arkhs. Patol.* 18, No. 2, 91-9 (1956).—A method is described for the quant. evaluation of changes in the permeability of capillaries which is based on measuring the intensity of fluorescence of protein complexes that enter into tissue spaces in the course of a developing inflammatory process.
B. S. Levine

POKROVSKIY, A. A.

✓ Study of the kinetics of methemoglobin content in the blood of small animals. A. A. Pokrovskii, *farmakol. i med.* 1

Toksikol. 19, No. 4, 63-7 (1950).—Quant. spectroscopy offers the basis for microdetn. of blood pigments. A method has been developed for detn. of methemoglobin in 6 cu. mm. of blood; it is especially useful for following changes in methemoglobin content in the blood of small test animals.

Julian R. Smith

POKROVSKIY, A. A.

med The effect of the alkaloids of the sprouting potato on cholinesterase. A. A. Pokrovskii (S. M. Kirov Military Med. Acad., Leningrad). *Biokhimiya* 21, 083-8(1956).--The water exts. of the sprouting potato tubers suppress the activity of the non-specific blood serum cholinesterase. The glycosalkaloids of the Solanaceae, solanine and tomatine, used in low concns. have a definite arresting effect on the activity of the non-specific cholinesterase. The aglycone, solanidine, constitutes the main group of solanine which exerts the anticholinesterase effect. With the true cholinesterase of the brain, solanine exerts only a slight effect. The antisterase property of solanine can be used as the basis for the development of methods for the identification of biologically harmful concns. of solanine in potatoes. B. S. Lavine

POKROVSKIY, A.A., GORKIN, V.Z.

Conference on the protein problem. Vop.med.khim. 4 no.3:236-239
My-Je '58 (MIRA 11:6)
(PROTEINS)

POKROVSKIY, A.A.

Use of enzymes in the detection of biologically harmful agents
[with summary in English]. Vop.med.khim. 4 no.4:292-297 J1-Ag '58.
(MIRA 12:2)

1. The "S.M. Kirov" Military Medical Academy, Leningrad.
(PHOSPHATES, determination,
insecticide prep., cholinesterase technic (Rus))
(CHOLINESTERASE,
phosphate insecticides determ. (Rus))

POKROVSKIY, A.A. (Leningrad)

Mechanism of the development of an inflammatory reaction. Arkh.
pat. 21 no.7:13-19 '59. (MIRA 13:5)

1. Iz Voenno-meditsinskoy ordena Lenina akademii imeni S.M.
Kirova.

(INFLAMMATION)

POKROVSKIY, A.A.

Paper electrophoresis studies; counterelectrophoresis in the enzyme-substrate system. Biokhimiia 24 no.2:291-300 Mr-Apr '59. (MIRA 12:7)

1. The Military-Medical Academy.

(ELECTROPHORESIS,

counter-electrophoresis in enzyme-substrate system (Rus))

POKROVSKIY, A.A., professor, polkovnik meditsinskoy sluzhby

Method for the rapid determination of the cholinesterase activity
of the blood. Voен.-med. zhur. no. 1:34-39 Ja '60.

(MIRA 14:2)

(CHOLINESTERASE) (COLORIMETRY)

POKROVSKIY, A.A. (Moskva)

Significance of enzymatic methods in the diagnosis of diseases.
Vop. med. khim. 6 no.3:228-243 My-Je '60. (MIRA 14:3)
(ENZYMES) (MEDICINE, INTERNAL)

MARDASHEV, Sergey Rufovich; POKROVSKIY, Aleksey Alekseyevich; PAVLOVA,
Nina Aleksandrovna; KAFYSHEVA, V.S., red.; YEZHOVA, L.L.,
tekhn. red.

[Laboratory demonstrations for lectures on biological chemistry;
manual for teachers] Demonstratsii k leksiiam po biologicheskoi
khimii; posobie dlia prepodavatelei. Moskva, Gos.izd-vo "Vysshiaia
shkola," 1961. 142 p. (MIRA 14:12)
(Biochemistry--Study and teaching)

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POKROVSKY A.A. (USSR)

"Enzyme Topography of the Brain."

Report presented at the 5th Int'l Biochemistry Congress,
Moscow, 10-16 Aug. 1961.

POKROVSKIY, A.A.; PONOMAREVA, L.G.

Distribution of cholinesterases in the brain of rhesus monkeys.
Biokhimiia 26 no.2:276-280 Mr-Apr '61. (MIRA 14:5)

1. Central Research Testing Institute of the Military Medicine,
Moscow.

(CHOLINESTERASE)

(BRAIN)

(MONKEYS)

POKROVSKIY, A.A.

Methods for determining the specific and nonspecific
cholinesterase in a blood microdrop. Biul. eksp. biol.
i med. 51 no.6:99-104 Je '61. (MIRA 15:6)

1. Predstavlena deystvitel'nyy chlenom AMN SSSR V.V. Parinyu.
(CHOLINESTERASE)

POKROVSKIY, A. A. (Moskva)

Enzymatic mechanism of some intoxications; tentative enzymatic
classification of poisons. Usp. biol. khim. 4:61-80 '62.
(MIRA 15:7)

(POISONS)

POKROVSKIY, A.A., prof.

Microscopic express methods for determining enzymatic activity and its diagnostic value. Biul. Uch. med. sov. 3 no.2:8-12 Mr-Apr '62.
(MIRA 15:4)

1. Chlen-korrespondent AMN SSSR.
(DIAGNOSIS) (ENZYMES)

POKROVSKIY, A.A., prof.

You didn't forget about them? Zdorov'e 8 no.10:11 0 '62.

(MIRA 15:10)

(VEGETABLES)

SEVROV, K.P., kand. tekhn. nauk; LOZOVY, P.A., kand. tekhn. nauk; KABALKIN, V.A., kand. tekhn. nauk; FOMIN, M.I., kand. tekhn. nauk; POKROVSKIY, A.A., inzh.; BROMBERG, A.N., doktor tekhn. nauk prof., retsenzent

[Road construction machinery] Dorozhnostroitel'nye mashiny. Moskva, Mashinostroenie, 1965. 384 p.

(MIRA 19:1)

SUKHORUKOV, V.V.; POKROVSKIY, A.D.

Electric inductive two-frequency fault detector. Zav. lab. 31
no.11:1404-1406 '65. (MIRA 19:1)

1. Moskovskiy energeticheskiy institut.

POKROVSKIY, A.F.

ATABEKOV, D.N., professor, laureat Stalinskoy premii.

Discussion on A.F.Pokrovskii's article, "New suture method for the
ureters." Akush.i gin. no.1:76 Ja-F '54. (MLRA 7:6)
(Ureters--Surgery) (Sutures)

POKROVSKIY, M.F.

BLINOVA, V.N.; DEMIDOV, A.A.; KOLIN, Ya.S.; MAKUSHKIN, Ya.G.; MYZIN, L.M.;
PERMYAKOV, N.P.; PONEVILKO, A.I.; BOROVIK, Z.G.; YEFREMOV, I.A.;
KOPAYGORODSKIY, A.B.; MARINOV, A.M.; NEKHOROSHKOVA, O.I.; POKROVSKIY,
A.F.; ROMANOVSKIY, A.A.; RASSADNIKOV, Ye.I., red.; SAVEL'YEV, V.I.,
red.; FRIDKIN, A.M., tekhn.red.

[Electric power in the Urals during the past 40 years] Energetika
Urals za 40 let. Moskva, Gos. energ. izd-vo, 1958. 141 p.

(MIRA 11:5)

(Ural Mountain region--Electric power)

AUTHORS: 1) Marinov, A. M., Engineer, Myzin, L. M. 105-58-6-26/33
Engineer, Pokrovskiy, A. F., Engineer
2) Belousov, M. M., Candidate of Technical Sciences

TITLE: The Underlying Principles of the Uniform Power System of the
European Part of the USSR (Osnovy yedinyo energeticheskoy
sistemy yevropeyskoy chasti SSSR)

PERIODICAL: Elektrichestvo, 1958, Nr 6, pp. 88 - 91 (USSR)

ABSTRACT: This is a comment on the article by V. I. Veyts in Elektri-
chestvo, 1957, Nr 1; 1) In the elaboration of a uniform power
system its scheme must not be projected starting only and
mainly from large power plants. In spite of the gigantic di-
mensions in the construction of the hydroelectric power plants
their specific share in the power economy at the end of the
sixth five-year-plan will only amount to 18%. At present ther-
mal power plants with 1 to 1,5 million kW are built in the
east, at the Ural and in the south. At first the question has
to be answered: what can more conveniently be conveyed - fuel
or electric energy? Coal with an ash content of 40% has recent-
ly be conveyed from the Ekibastuz- basin (75°30' east longitude
51°40' north latitude) to the Ural. Large thermal power plants

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should be constructed in the Ekibastuz basin and electric energy should mainly be conveyed to the Ural. Open-work mining was begun in the coal basin of Kushmurun (64°30' east longitude, 52°30' north latitude) of the Kustanay region. The brown coal of this deposit also has a high ash content. New electric power plants which are supplied with this coal are built at the Ural. At the same time electric power plants with 1,2 to 2,4 million kW are projected in the Kustanay region. It had to be determined what can more advantageously be conveyed from Kushmurun to the Ural: coal or electric power. The transfer of electric energy from Siberia to the Ural and farther to the west of the country must not only be brought into accordance with the hydroelectric power plants but also with the working of the large coal deposits in the Asiatic part of the country and with the construction of large thermal power plants. A principal scheme for the connection between Ural and Siberia is given here. According to this scheme two large longitudinal connections in the direction of Omsk-Tyumen'-Sverdlovsk and Omsk-Petropavlovsk-Chelyabinsk should be established. Along the main railroad lines a 110 kV distribution network consisting of two-circuit lines of intermediate and cen-

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tral substations with 110 kV is to be set up. For increasing the transmitting power of the 110 kV lines the possibility of changing them to a 154 kV voltage (where necessary) is to be investigated. - At present distributing networks with 110 kV are built in the section of Novosibirsk-Omsk-Kurgan-Chelyabinsk. The disregard of the development of 6 kV, 35 kV and 110 kV networks led to the fact that a large number of small uneconomic plants exist beside large electric power plants and that a considerable number of inhabited places is without power supply. These consume much fuel and need much personnel. An immediate solution of the problem concerning the construction of the hydroelectric power plant at the lower Ob' and the strengthening of the hydroelectric power plants at the Kama is demanded. The works by the Gidroyekt show that it would be possible to establish a hydroelectric power plant with several million kW at the lower Ob' in the Region of Salekhard (town at the polar circle, on the Ob'). For the next 10 years the Kama and its water basin will represent the main source of the power system of the Ural. The work of the hydroelectric power plants Votkinskaya and Nizhne Kamskaya have recently been check-

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ed. 2) The first and most important task consists in the connection of the small and average power systems with the large ones and in the establishment of the 110 and 35 kV networks for supplying all places and industries by the large power systems. The opinion that the problems on the construction of inter-system lines with 400 kV can be dealt with independently of the problems of the development of 110-220 kV networks is wrong. The only reasonable basis for projecting a uniform high-voltage network is a joint plan for the development of the power systems, the 110 - 220 kV networks and the 400 - 500 kV networks. There is 1 figure.

1. Industry--USSR 2. Water power--USSR 3. Electric power production--USSR

Card 4/4

L 26711-66

EWT(d)/FBD/EWT(1)/EWP(e)/EWT(m)/EEC(k)-2/T/EWP(k)/EWA(h) IJP(c)

ACC NR: AP6015443

WG/WH

SOURCE CODE: UR/0051/66/020/005/0921/0923

AUTHOR: Pokrovskiy, A. G.; Filippova, M. A.

ORG: none

TITLE: A theoretical study of controlling ruby laser generation by means of a modulated traveling ultrasonic wave diffraction modulator

SOURCE: Optika i spektroskopiya, v. 20, no. 5, 1966, 921-923

TOPIC TAGS: laser, solid state laser, ruby, coherent light, light modulation diffraction, modulator

ABSTRACT: A theoretical analysis is conducted of experiments described elsewhere (Optika i spektroskopiya, v. 20, no. 5, 1966, 924) in which a laser beam was modulated by an ultrasonic wave in a diffraction modulator placed between the ruby laser rod and the external mirror of an interferometer. Using a computer, the authors calculated the emission intensity, population inversion, and beam attenuation from a ruby laser modulated by ultrasonic waves for the cases of sinusoidal and square modulation frequencies. The results obtained are in good agreement with the experimental data, i.e., it was shown that the pulse should consist of a regular sequence of pulsation packets. The number of relaxations per packet should decrease with increasing

Cord 1/2

UDC: 621.375.9:535+534.321.9

L 26711-66

ACC NR: AP6015443

modulation frequency until at some high frequency some packets will not be generated.
Orig. art. has: 3 formulas and 3 figures. [CS]

SUB CODE: 20/ SUBM DATE: 18Feb65/ ORIG REF: 001/ OTH REF: 003/ ATD PRESS: 4258

Card 2/2

POKROVSKIY, Aleksei Ivanovich, 1880-

Collected works marking the 40th anniversary of M.I Averbakh's scientific activity. Moskva, Gos.izd-vo biologicheskoi i med. lit-ry, 1935. 596 p. (55-52234)

RE14.M6

1. Ophthalmology - Collected works.

POKROVSKIY, A.I.

Pokrovskiy, A.I. "Problems of treating trachoma from point of view of the condition of reactive features of those having the organism afflicted," *Nauch. rabot, posvyashch. pamyati akad. Averbakha*, Moscow-Leningrad, 1946, p. 119-38

SO: U-3264, 10 April 1953, (Letopis 'Zhurnal 'nykh Statey, No. 3, 1949)

POKROVSKIY, A. T.

Glaucoma

Clinical findings in acute forms of glaucoma. Vest. oft. 21 No. 1, 1952.

9. Monthly List of Russian Accessions, Library of Congress, April 1952. ~~1953~~, Uncl.

POKROVSKIY, A. I.

Development of visual perception and judgment in
postoperative restoration of sight according to works
of I.P. Pavlov. Vest. oft., Moskva 32 no.6:6-17
Nov-Dec 1953.

(CML 25:5)

1. Honored Worker in Science, Professor, Director of the
Eye Clinic of Voronezh Medical Institute.

POKROVSKIY, A. I., prof., zasluzhennyy deyatel' nauki, (Voronozh)

Clinical observations of severe glaucoma. Vest. oft. 34 no. 1:3-9

Ja-P '55

(MIRA 8:4)

(GLAUCOMA,
severe, clin. picture)

POKROVSKIY, A.I., zasluzhennyy deyatel' nauki, professor.

Pathogenesis of conjunctival and corneal changes in trachoma.
Vest.oft.34 no.4:5-10 J1-Ag '55. (MLRA 8:10)

1. Direktor glaznoy kliniki Voronezhskogo meditsinskogo instituta.
(TRACHOMA, pathology,
conjunctive & cornea)

YEVSTYUGOV, Aleksandr Ivanovich, inzh.; POKROVSKIY, Aleksandr
Il'ich, inzh.; KREYNDLIN, L.N., nauchn. red.; STAROSVETOVA,
V.G., red.

[Woodworking operations] Plotnichnye raboty. Moskva, Vysshaya
shkola, 1965. 300 p. (MIRA 18:4)

INKER, Mishel' [Hincker, Michel]; NOVIKOV, R.A.[translator]; KHOLINA,
N.I.[translator]; POKROVSKIY, A.I., red.; KISELEVA, V.I.,
red.; KHOMYAKO, A.D., tekhn. red.

[New aspects of financial oligarchy in France] Novye cherty fi-
nansovoi oligarkhii vo Frantsii. Obshchaia red. i predisl.
A.I.Pokrovskogo. Moskva, Izd-vo inostr. lit-ry, 1960. 137 p.
Translated from the French. (MIRA 15:3)
(France--Economic conditions)

POKROVSKIY, A.I. [Pokrovs'kiy, O.I.]

Formation of gas fields in the Donets Basin and Dnieper-Donets
Lowland. Geol.zhur. 22 no.5:85-90 '62. (MIRA 15:12)

1. Trest "Artemgeologiya."
(Donets Basin--Gas, Natural--Geology)
(Dnieper-Donets Lowland--Gas, Natural--Geology)

POKROVSKIY, A.I.

TSAGOLOV, N.A., prof., doktor ekon.nauk; BLYUMIN, I.G., prof., doktor ekon.nauk [deceased]; RUMYANTSEV, A.M., prof.; KORNIYENKO, A.A., dotsent, kand.ekon.nauk; SHNEYTERSON, A.I., prof., doktor ekon.nauk; LIF, Sh.B., prof., doktor ekon.nauk; SHVEDKOVA, G.M., kand.ekon.nauk; FISHEVSKIY, Yu.K.; DVORKIN, I.N., doktor ekon.nauk; SIDOROV, I.F.; KHAFIZOV, R.Kh., kand.ekon.nauk; NIKOLAYEV, A.B., kand.ekon.nauk; AVRACHUK, F.P., kand.ekon.nauk; AL'TER, L.B., doktor ekon.nauk; BOYARSKIY, A.Ya., prof., doktor ekon.nauk; BREGEL', E.Ya., prof., doktor ekon.nauk; ARZUMANYAN, A.A.; VOLODIN, V.S., dotsent, kand.ekon.nauk; MIKSHA, L.S., kand.ekon.nauk; BUNKINA, M.K., dotsent, kand.ekon.nauk; YEVREYSKOV, A.V., kand.ekon.nauk; FADEYEVA, T.A., kand.ekon.nauk; KOLGANOV, M.V., prof., doktor ekon.nauk; KHROMUSHIN, G.B., kand.ekon.nauk; MOSHENSKIY, M.G., kand.ekon.nauk; IVANOV, N.N., kand.ekon.nauk; GUTTSAYT, M.G., dotsent, kand.ekon.nauk; ABOLTIN, V.Ya., prof., doktor ekon.nauk; KOLLONTAY, V.M., kand.ekon.nauk; GLUKHAREV, L.I., kand.ekon.nauk; POKROVSKIY, A.I., kand.ekon.nauk; DADASHEV, G.A., dotsent, kand.ekon.nauk; ALESHINA, I.V., kand.ekon.nauk; ZHAMIN, V.A., dotsent, kand.ekon.nauk;

(Continued on next card)

TSAGOLOV, N.A.--(continued) Card 2.

KOZLOV, A.P.; TIMOFEYEV, T.T., kand.istor.nauk; ALEKSEYEV, A.M., dotsent, kand.ekon.nauk; FILATOVA, Ye.M., dotsent, kand.ekon.nauk. Prinsipali uchastiye: VOLKOV, F.M., kand.ekon.nauk; KHROMUSHIN, G.B.; VOZNESENSKIY, L.A., nauchnyy sotrudnik. SPERANSKAYA, L., red.; CHEPELEVA, O., tekhn.red.

[Criticism of present-day bourgeois, reformist, and revisionist economic theories] Kritika sovremennykh burzhuaznykh, reformistskikh i revizionistskikh ekonomicheskikh teorii. Pod red. N.A.TSagalova. Moskva, Izd-vo Sotsial'no-ekon.lit-ry, 1960. 588 p. (MIRA 13:5)

1. Moscow. Universitet. 2. Chlen-korrespondent AN SSSR (for Arzumanyan).

(Economics)

KUCHER, Aleksandr Mikhaylovich; KIVATITSKIY, Mikhail Moiseyevich;
~~POKROVSKIY, Antoniy Aleksandrovich~~; SHAVLYUGA, N.I., kand.
tekhn.nauk, red.; VARKOVETSKAYA, A.I., red.izd-va; SHCHE-
TININA, L.V., tekhn.red.

[Metal-cutting machine tools; brief descriptions of kinematic systems. Supplement to posters Set No.3: Planing, broaching, grinding, and gear-cutting machines] Metallorezhushchie stanki; kratkoe opisanie kinematicheskikh skhem. Prilozhenie k plakatom Seriya III: Strogal'nye, spotiazhnye, shlifoval'nye i zuboobrabatyvayushchie stanki. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroi. lit-ry, 1959. 46 p. [__Set of posters: "Kinematic systems of metal-cutting machine tools."] __ Seriya plakatov: "Kinematicheskie skhemy metallorezhushchikh stankov." 13 diagr.

(MIRA 13:5)

(Machine tools)

GLUSHKOV, V.P., kand. ekon. nauk; POKROVSKIY, A.I., kand. ekon. nauk; VEBER, A.B., kand. istor. nauk; VASIL'KOV, N.P., kand. ekon. nauk; ARDAYEV, G.B., kand. ekon. nauk; TIMASHKOVA, O.K., kand. ekon. nauk; KHEMEL'-NITSKAYA, Ye.L., doktor ekon. nauk, otv. red.; PANTELEYEV, V.I., red. izd-va; RYLINA, Yu.V., tekhn. red.

[Government ownership in Western Europe] Gosudarstvennaia sobstvennost' v stranakh Zapadnoi Evropy. Moskva, Izd-vo Akad. nauk SSSR, 1961. 463 p. (MIRA 14:11)

1. Akademiya nauk SSSR Institut mirovoy ekonomiki i mezhdunarodnykh otnosheniy. 2. Sektor stran Zapadnoy Yevropy Instituta mirovoy ekonomiki i mezhdunarodnykh otnosheniy AN SSSR (for all except Panteleyev, Rylin).

(Europe, Western--Government ownership)

POKROVSKIY, A. I.

"On the Post-War Crisis of the Bourgeois Economic Thought in France."

dissertation defended for the degree of Candidate of Economy at the Inst.
for Economy.

Defense of Dissertation (Jan-Jul 1957)
Sect. of Economy, Philosophy, and Jurisprudence
Vest. AN SSSR, 1957, v. 27, No. 12, pp. 126-128

150.

Rectification of alcohol. G. I. Fertman and A. L. Pokrovskiy, U.S.S.R. 68,535, May 31, 1947. To increase the yield of pure alc. and to lower the consumption of steam, the steam pressure during the driving off of the first running is increased by checking the exit of alc. vapors from the condenser while steam is fed into the still.

M. Hosh

FADEYEV, Sergey Pavlovich [deceased]; ZYBIN, V.P., doktor tekhn. nauk, retsenzent; POKROVSKIY, A.M., kand. tekhn. nauk, dots., nauchn. red.; KOLODYAZHNAYA, Zh.A., red.

[Design of machine parts; collection of problems] Raschety detalei mashin; sbornik zadach. Moskva, Vysshaya shkola, 1964. 180 p. (MIRA 18:3)

1. Zaveduyushchiy kafedroy "Detali mashin PTU" Vsesoyuznogo zaochnogo instituta tekstil'noy i legkoy promyshlennosti (for Zybin).

FADEYEV, Sergey Pavlovich[deceased]; ZYBIN, V.P., doktor tekhn. nauk, retsenzent; POKROVSKIY, A.M., kand. tekhn. nauk, dots., nauchn. red.; FUFAYEVA, G.I., red.

[Preparation of a course project on machine parts] Kursovoe proektirovanie detalei mashin. Moskva, Vysshaya shkola 1964. 302 p. (MIRA 18:2)

1. Zaveduyushchiy kafedroy "Detali mashin" Vsesoyuznogo zaochnogo mashinostroitel'nogo instituta (for Zybin).

POKROVSKIY, A.N. (Leningrad)

Calculation of the weight function of a sampled-data system using
a known transfer function of an analog system. Izv. AN SSSR. Tekh.
kib. no.3:129-133 Je '64.

(MIRA 17:10)

POTAPOV, I.S.; FINOGENOV, V.P.; SLODKIN, R.G.; KAPELINSKIY, Yu.N.;
MENZHINSKIY, Ye.A.; SEROVA, L.V.; POKROVSKIY, A.N.;
PEVZNER, Ya.A.; LEBEDEV, B.I.; VLADIMIRSKIY, L.K.;
MATYUKHIN, I.S.; ROGOV, V.V.; PISKOPPEL', F.G., doktor ekon.
nauk, prof., red.; SHLENSKAYA, V.A., red.izd-va; ZINCHENKO,
V.S., red.izd-va; PAVLOVSKIY, A.A., tekhn. red.

[Foreign trade of capitalist countries] Vneshniaia trgovlia
kapitalisticheskikh stran. [By] I.S.Potapov i dr. Moskva,
Vneshtorgizdat, 1963. 456 p. (MIRA 16:9)
(Commerce)

FOKROVSKIY, A.N.

Some clinical characteristics of the Kandinskii syndrome and
its evaluation on the basis of forensic psychiatry. Probl.
sud. psikh. no.13:168-177 '62. (MIRA 18:9)

POLYANIN, D.V.; ZOTOV, G.M.; GRYAZNOV, E.A.; MENZHINSKIY, Ye.A.; RUBININ, A.Ye.; CHEBOTAREVA, Ye.D.; ZAKHMATOV, M.I.; OKUNEVA, L.P.; SHMELEV, V.V.; STULOV, A.A.; POKROVSKIY, A.N.; SHIL'DKRUT, V.A.; IVANOV, A.S.; NABOROV, V.B.; FINOGENOV, V.P.; KUR'YEROV, V.G.; KHRAMTSOV, B.A.; BATYGIN, K.S.; BOGDANOV, O.S.; KROTOV, O.K.; GONCHAROV, A.N.; KRESTOV, B.D.; LYUESKIY, M.S.; SOKOL'NIKOV, G.O.; KAMENSKIY, N.N.; YASHCHENKO, G.I.; SABEL'NIKOV, L.V.; GERCHIKOVA, I.N.; FEDOROV, B.A.; STEPANOV, G.P.; BORODAYEVSKIY, A.D.; INGATUSHCHENKO, S.K.; VARTUMYAN, E.L.; KAPELINSKIY, Yu.N. red.; MAYOROV, B.V., red.; NABOROV, V.B., red.; SOLODKIN, R.G., red.; DROZDOV, A.G., red.; ROSHCHINA, L., red.; SOLOV'YEVA, G., ~~mladshiy~~ red.; CHEPELEVA, O., tekhn. red.

[The economy of capitalist countries in 1961; economically developed countries] Ekonomika kapitalisticheskikh stran v 1961 godu; ekonomicheski razvitye strany. Pod red. IU.N.Kapelinskogo. Moskva, Sotsekgiz, 1962. 447 p. (MIRA 16:2)
(Economic history)

POKROVSKIY, A.N.

Kandinski's syndrome in chronic alcoholism; clinical observations.
Probl.sud.psikh. no.12:72-84 '62. (MIRA 16:4)
(ALCOHOLISM) (SCHIZOPHRENIA)

1. POKROVSKIY, A. N. ; MAGDEPUROV, N. G.
2. USSR 600
4. Nets
7. Fastening wings of stationary nets by the ground line on Sakhalin, Ryb. khoz, 28, No. 12, 1952.
9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

GRINBERG, G.A. (Leningrad); POKROVSKIY, A.N. (Leningrad); UFLYAND,
Ya.S. (Leningrad)

Characteristic state of stress of an elastic thin wedge-shaped
plate with a fixed and a free side. Inzh.sbor. 22:193-198 '55.
(MLRA 9:5)

1. Leningradskiy politekhnicheskiy institut imeni M.I. Kalinina.
(Elastic plates and shells) (Strains and stresses)

POKROVSKIY, A.N.

PREOBRAZHENSKIY, P.V.; BELOUSOV, A.P.; DZHAVADYAN, N.S.; LIZOGUBOV, V.N.;
ORKODASHVILI, L.P.; POKROVSKIY, A.N.

Clinical aspects and treatment of penetrating injuries of the cornea
in radiation sickness in dogs. Vest. oft. 70 no.3:10-13 My-Je '57.
(MLRA 10:8)

1. Kafedra oftalmologii (nach. - prof. B.L.Polyak) Voenno-meditsin-
skoy ordena Lenina akademii imeni S.M.Kirova

(CORNEA, wds. and inj.

exper., eff. of x-irradiation on healing in dogs)

(ROENTGEN RAYS, eff.

on healing of exper. wds. of cornea in dogs)

POKROVSKIY, A.N., .inzh..

Fastening the wings of pound nets by vertical steel guy ropes.

Trudy VNIRO 41:159-161 '59.

(MIRA 13:8)

(Fishing nets)

POKROVSKIY, Aleksandr Nikolayevich; BUKIN, Aleksandr Alekseyevich; GAV-
RILOV, Dmitriy Fedorovich; TOLKACHEV, S.S., retsenzent; GONCHA-
RUK, Yu.K., red.; STRYZHKOVA, N.I., red. izd-va; NIKOLAYEVA,
L.N., tekhn. red.

[Operating motortrucks with carburetor engines under low temperature
conditions] Ekspluatatsiia avtomobilei s karbiuratornymi dvigatelemi
v usloviakh nizkikh temperatur. Moskva, nauchno-tekhn. izd-vo M-va
avtomobil'nogo transp. i shosseynykh dorog RSFSR, 1961. 171 p.

(MIRA 14:10)

(Motortrucks—Cold weather operation)

30117
S/044/62/000/006/104/127
B166/B112

16.8000

AUTHOR:

Pokrovskiy, A. N.

TITLE:

The use of digital computers for the statistical synthesis of automatic control systems

PERIODICAL:

Referativnyy zhurnal. Matematika, no. 6, 1962, 52-53, abstract 6V260 (Sb. "Primeneniye vychisl. tekhn. dlya avtomatiz. proiz-va". M., Mashgiz, 1961, 114-128)

TEXT: When there are random actions the process of synthesizing optimum automatic control systems frequently contains stages requiring laborious calculations for which in a number of cases fast universal digital computers can be used. Cases in which the use of digital computers (d.c.) is expedient are examined, as well as questions associated with the efficiency of this use of d.c. An examination is made of the problem of synthesizing linear systems for a given transient period and given dynamic error coefficients when there are random disturbances in the criterion of minimum error dispersion. The problem is reduced to the solution of an integral equation of the form

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B166/B112

The use of digital computers ...

$$\int_0^T R(t; \tau) w(\tau) d\tau = F(t)$$

for continuous systems, and for a discrete system to the solution of a system of equations of the form

$$\sum_{n=0}^N R(nT_0; mT_0) w_n = F(kT_0)$$

with restrictions of the form

$$\int_0^T f_i(\tau) w(\tau) d\tau = \mu_i;$$

$$\sum_{n=0}^N f_i(nT_0) w_n = \mu_i,$$

respectively. The accuracy of the solution to equation (1) is evaluated by approximate methods. An algorithm for determining the weight functions

Card 2/3

41461

S/044/62/000/009/059/069
A060/A000

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AUTHORS: Solodovnikov, V.V., Batkov, A.M., Baburin, V.M., Val'denberg, Yu.S.,
Matveyev, P.S., Pokrovskiy, A.N.

TITLE: Analysis and synthesis of automatic control systems using the means
of computer technology

PERIODICAL: Referativnyy zhurnal, Matematika, no. 9, 1962, 43, abstract 9V229
("Tr. I Mezhdunar. kongressa Mezhdunar. federatsii po avtomat.
upr., 1960. (T. 4). Tekhn. sredstva avtomatiki", Moscow., AN SSSR,
1961, 191 - 206. Discussion, 206 - 207)

TEXT: The problem of analyzing an automatic control system which is af-
fected by several perturbing forces reduces to the solution of integral equa-
tions of the form:

$$R_{x_1 y_k}(t) = \int_0^{\infty} R_{y_k y_k}(t - \tau) K_k(\tau) d\tau \quad \text{for } i = 1, 2, \dots, n; \quad (1)$$

$k = 1, 2, \dots, m.$

Card 1/4

Analysis and synthesis of automatic

S/044/62/000/009/059/069
A060/A000

The problem of system synthesis reduces to the solution of an integral equation

$$\int_0^T R(t - \tau) K(\tau) d\tau = F(t); \quad 0 \leq t \leq \infty; \quad (2)$$

with constraints of the form

$$\int_0^T f_1(\tau) K(\tau) d\tau = \mu_1. \quad (3)$$

The paper considers: first, the general method of solution in closed form of the class of synthesis problems which reduce to the integral equation (2); second, the application of the method of inverse systems to the analysis of linear systems by means of electronic simulating installations in the case of nonstationary random forces at the input; third, special-purpose computers elaborated by the authors and, fourth, some problems of applying general-purpose digital computers to the solution of problems which reduce to the expressions (1) and (2). The method of solution set forth does not require the application of artificial methods and includes as special cases all the analyzed problems of statistical dynamics in the class of systems with constant parameters. The theorems set forth in the article make it possible to: 1) determine the correlation

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Analysis and synthesis of automatic

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A060/A000

function of the output signal of an automatic control system with variable parameters in the presence of white noise at the input; 2) determine the differential equation of the shaping filter for a nonstationary stochastic process with a correlation function of the form

$$R(t, \tau) = \sum_{i=1}^n \varphi_i(t) \psi_i(\tau) \quad (t > \tau),$$

where φ_i and ψ_i are linearly independent functions continuously together with their derivatives; n is bounded. A similar method may be applied to automatic control systems containing inertialess elements. The system of equations thus obtained may be solved with the aid of a simulator. The correllograph described is a special-purpose analog computer. It is designed for the computation of correlation functions of processes with a low-frequency spectrum of $0 \div 20$ cps. The error of the solution is $5 \div 10\%$ of the maximum value. The synthesizer is a special-purpose computer for the solution of linear one-dimensional integral equations of the Fredholm and Volterra type of the first and second kind with a convolution kernel and also for calculating autocorrelation and correlation

Card 3/4